

Through Marshall's Technology Transfer Office

NASA Grant to Help Grow New Technology-Based Businesses

by Steve Calatrello

An additional \$435,000-grant to help grow new technology-based businesses will be awarded to the Business Technology Development Center Inc. of Huntsville, through Marshall's Technology Transfer Office. This grant brings NASA's total contribution to \$735,000 over the past year.

Business Technology Development Center Inc. — also known as BizTech — is a not-for-profit business incubator. In the same way newborns need extra care to

thrive, business incubators like BizTech support and nurture young, small businesses through their vulnerable years.

"Part of our role involves making NASA-developed and emerging technologies available to BizTech's clients for potential commercialization," said Sally Little, director of Marshall's

"We want to establish a presence within the incubator to provide on-the-spot assistance, and to help with local economic development."

— Sally Little
Director, Marshall's Technology
Transfer Office

Technology Transfer Office and member of BizTech's advisory committee. "We want to establish a presence within the incubator to provide on-the-spot

assistance, and to help with local economic development. We're excited about the potential of this partnership."

"The NASA grant will enable BizTech to continue construction and operation of a new, permanent facility," said Joanne Randolph, BizTech's administrative director.

BizTech's new facility — scheduled to
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Parents to Bring Children to Work on Thursday

Children of Marshall Center employees will get a firsthand look at their parents on the job when Marshall observes "Take Our Children to Work Day" Thursday. The day is designed for employees' children in grades 3 through 12. Celebration activities will include a Center tour, and children will be given the opportunity to have their photographs taken.



NASA photo

Engineers, Technicians Develop New Welding Repair Technique

A welding technician at Marshall repairs an aluminum lithium weld using a new technique developed by engineers and technicians at the Center. Developed jointly by NASA and Lockheed Martin, the new technique was devised to manufacture the new, super lightweight Space Shuttle external tank. It results in much better mechanical properties than repairs made with standard techniques. The giant fuel tank made its debut with the June 2 launch

of the Space Shuttle Discovery. The Shuttle's new, super lightweight fuel tank features aluminum lithium — a lighter, stronger material than the metal alloy used to manufacture previous external tanks. The new tank is the same size as the one it replaces — but about 7,500 pounds lighter. The weight reduction is essential for launching heavy elements of the future International Space Station for assembly on orbit.

**Mark Your Calendar
The Picnic is
Coming!**



Fortieth Anniversary
Pioneering the Future

August 22

Seminar to Address Federal Retirement Systems

The Employee & Organizational Development Office at Marshall will sponsor a seminar "Federal Employees Retirement System (FERS) or Civil Service Retirement System (CSRS), Which is Right For You" 8 a.m.-noon, Wednesday, July 22. Through lecture and discussion, this four-hour seminar will compare information about both Federal retirement systems allowing each employee to select the system which is best for them. Discussion topics include:

- Retirement Eligibility
- Length of Service and High Three
- Allowance for Sick Leave
- Transferring From CSRS to FERS
- Disability Retirement
- Death of an Employee
- Survivor Benefits
- COLA's
- Computation of the Annuities for Both Systems
- Special Retirement Supplements for FERS
- Reduction in Annuity for Being Under Age

Seminar enrollment deadline is 4:30 p.m. July 10, limited to 100 people on a first-come-first-serve basis. For more information, contact Francee Logston via e-mail at: francee.logston@msfc.nasa.gov

Employees Should Not Disturb Wildlife Nesting Areas Around Marshall Center

The Environmental Health Office at Marshall requests that employees avoid areas where significant wildlife nesting materials, excreta or other animal remains are found. Various forms of wildlife such as rodent and pigeons carry pathogens. Exposure to these microorganisms, such as viruses and bacteria, can cause diseases in humans. If signs of wildlife infestation are encountered, call Marshall's Environmental Health Office at 544-2390.

MMA to Announce New Name, Scholarship Winners During Luncheon Friday at Center

The Marshall Management Association (MMA) will announce its new name and scholarship recipients at a luncheon 11:30 a.m. Friday in the Bldg. 4203 cafeteria. Dr. Charles Elachi, director for Space and Earth Science Programs at the Jet Propulsion Laboratory, Calif., will be the luncheon guest speaker. Elachi's topic "NASA's Solar System Exploration and Origins" will feature information on Mars Pathfinder, Galileo and other missions to our solar system. The association recently updated its bylaws to allow membership by all Marshall employees and retirees. Tickets are \$10 each and reservation deadline is noon Thursday. For reservations, contact T. Jerry Williams via e-mail or call 544-0295.

News Clips About Marshall, NASA on Intranet

Daily "News Clips" about Marshall and NASA are available on the Inside Marshall homepage under the News Sources heading or at: <http://www.msfc.nasa.gov/msfccwa/pao/clips.pdf>



NASA photo by Terry Leibold

Cosmonauts See ISS Hardware at Marshall

Astronaut Tom Jones, left, points out International Space Station Laboratory hardware components to Russian cosmonauts Vasili Tsibliev and Alexander Lazutkin, and astronaut Michael Foale, right, during a recent visit to Marshall. The cosmonauts and Foale shared advice from experience on their space stays on Mir. Jones will fly on STS-98, the U.S. Laboratory assembly mission, in October 1999.

NASA Selects Seven Companies to Provide Information Technology Services

NASA has selected seven companies to fulfill a multi-billion-dollar contract that will apply a "faster, better, cheaper" approach to the way the Agency obtains desktop computers and local communications services.

The contract, called the Outsourcing Desktop Initiative for NASA (ODIN), will deliver comprehensive desktop computer, server, and intra-center communications services to NASA and NASA contractors. Other government agencies will be able to buy from the ODIN contractors through the General Services Administration (GSA).

"ODIN provides the most cost-effective solution to deliver these services to the Agency," said NASA Chief Information Officer Lee B. Holcomb. "This is probably the boldest move any federal agency has made in an effort to outsource computers."

Under the contract, NASA will define the computer and
See Information Technology Services on page 5

NASA History Book Available on the Internet

"Beyond the Atmosphere: Early Years of Space Science" is now available on the Web at:

<http://www.hq.nasa.gov/office/pao/History/SP-4211/cover.htm>

Written by Homer Newell, former NASA associate administrator for space science, "Beyond the Atmosphere" covers administrative and technical aspects of this subject, as well as such topics as international cooperation.

Marshall Made It Happen

AARP Convention Offers NASA an Opportunity to Shine

by Joy Carter

NASA grabbed a golden opportunity to share the best the Agency has to offer with members of one of the largest and most influential organizations in the country. And the Marshall Center made it happen.

Marshall brought together exhibits and staffers from six NASA field centers and Headquarters to showcase NASA's top programs at the

Biennial

Convention of the American Association of Retired Persons

(AARP), June

2-4, in

Minneapolis, Minn.

About 11,000 people visited the NASA exhibit — which covered more than 5,000 square feet of the Minneapolis Convention Center exhibit hall. The Washington Post reported, "NASA fills a significant and popular corner of the room with replica rockets and a section of the future Space Station. John Glenn aside, neither the agency nor the association sees its appearance as incongruous. "This is the

"This is the generation that put America in space."

generation that put America in space,' one AARP official said."

Marshall's Microgravity Research and Reusable Launch Vehicle program displays were prominent parts of the exhibit, as was the Marshall-managed International Space Station exhibit. Other displays represented such NASA programs as Education, Aeronautics and Space Transportation Technology, Earth Sciences and Space Sciences.

Through its representation on the AARP Exhibits Advisory Council, Marshall's Media Relations Office also planned and coordinated other NASA activities for the convention. NASA



Courtesy photo

Steve Cook, right, technical assistant for NASA's Advanced Space Transportation Program at Marshall, talks with a member of the American Association of Retired Persons (AARP) at the organization's biennial convention held recently in Minneapolis, Minn. Cook, a Minneapolis native, was on hand to staff the Space Transportation Program exhibit and to talk about Marshall-managed X-33 and X-34 programs and Marshall's role in other space transportation efforts.

astronaut and AARP member Shannon Lucid — who in 1996 set a 188-day record for the longest American stay in space — kicked off the convention as its keynote speaker. She and fellow astronaut Bob Cabana — a Minneapolis native — also hosted a reception and tour of the NASA exhibit for convention officials, including AARP President Margaret Dixon and Executive Director Horace Deets.

But the exhibit wasn't just for the young at heart. During the convention, Cabana hosted a group of 30 students from a Minneapolis middle school for a science lesson and exhibit tour. Two Minneapolis television stations and a Michigan-based PBS production company were on hand to capture the children's experience.

"NASA's participation in the convention was the culmination of two years of careful coordination led by Marshall's Media Relations Office with AARP and NASA Headquarters," said John Dumoulin, Marshall exhibits manager. "This event sets a new standard for what can be accomplished when NASA outreach teams work together."

Internet Site Provides Fire Monitoring by Satellite

In an effort to provide up-to-date information to the public and scientific communities about current fire situations around the globe, NASA recently unveiled a new presence on the World Wide Web that provides a synopsis of current information about fires and their effect on global climate change.

This Web site features revealing animation depicting wildfires across the globe and can be found at the following Website:

http://modarch.gsfc.nasa.gov/fire_atlas/fires.html

Recent imagery, analysis of data from the early and mid-1990s and a synthesis of a range of satellite information resources

that are currently available about terrestrial fires and future global fire monitoring capabilities are also provided. The Web site draws on satellite resources from several U.S. agencies and international partners to serve the needs of the scientific community and the public.

Nearly 175 million acres of forest and grasslands are burned each year worldwide.

Using data from satellite sensors, aircraft, and ground-based initiatives, scientists are working to develop a new global fire-monitoring program that will enable them to better understand the many implications of this growing problem.



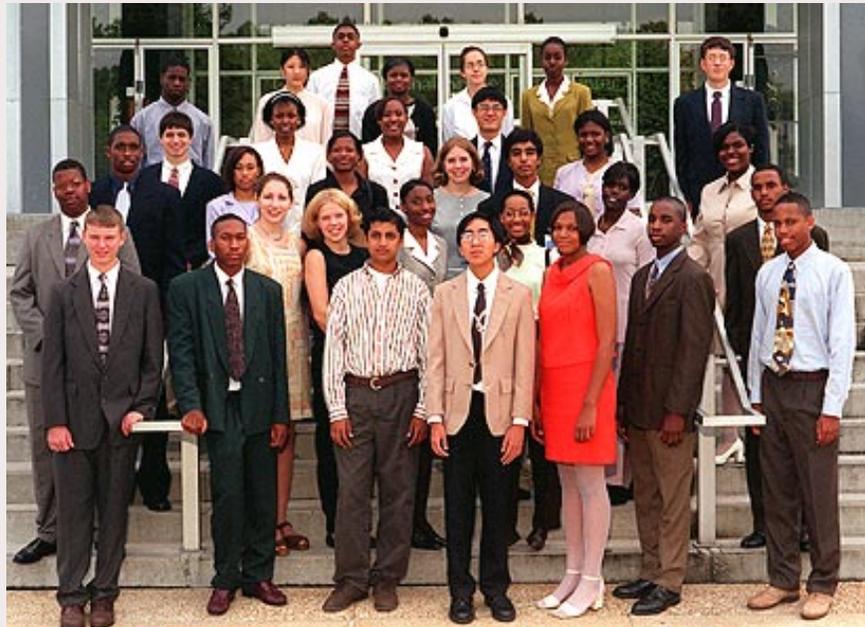
Students Explore Careers Through SHARP Program

Thirty-two students from Huntsville/Madison County public, private and parochial schools are participating in the 1998 Summer High School Apprenticeship Research Program (SHARP) at Marshall.

SHARP offers local students career exploration through on-the-job training. Students spend four of nine weeks with mentors from the Center's Science and Engineering Directorate. SHARP is a summer program sponsored by the Education Programs Office at Marshall.

NASA photos by Emmett Given

Above, Mark Fisher, left, of Marshall's Propulsion Systems Engineering Branch, mentors local high school student Norton Webb, Jr., as part of the Summer High School Apprenticeship Research Program at Marshall.



Right, Marshall's 1998 SHARP students from Huntsville/Madison County public, private and parochial schools participating in this summer's program.



Scouts Wrap Up Week-Long Aerospace Activities Program at Marshall

Marshall Explorer Post 2001 scouts get ready to launch self-built model rockets at the U.S. Space Camp Launch Pad. This one-week program, sponsored by Marshall's Education Programs Office, offers local high school students the opportunity to participate in career exploration activities in aerospace. Participants are, from left, Eric Hughes, Butler High School; Otutu Kamalu, Grissom High School; Heather Gravitz, Bob Jones High School; Tim Huddleston, director of Alabama Aerospace Teachers Association; Ami Shah, Grissom High School; Mansi Shah, Grissom High School; Nilam Shah, Grissom High School and Jeffrey Vollers, Bob Jones High School.

NASA photo by Emmett Given

Upcoming Events

Retirement Transfer Issues to Be Addressed Today

Federal Employees Retirement System (FERS) transfer issues will be addressed noon-1:30 p.m. today during a satellite broadcast on Marshall's closed-circuit television channel 3. During this interactive broadcast, employees eligible for transfer to FERS may direct questions to the panel by telephone or fax at the numbers provided at the beginning of the program.

All-Hands Meeting Set for June 30 In Morris Auditorium

An All-Hands Meeting will be held at 10 a.m. Tuesday, June 30, in Bldg. 4200, Morris Auditorium. Employees who are unable to attend may view the meeting on Centerwide closed-circuit television.

Seminar at Center to Discuss Motivation Techniques

The Employee and Organizational Development Office at Marshall will broadcast a live, interactive seminar featuring Bill Byham, author of the bestseller "ZAPP!! The Lightening of Empowerment" noon-2 p.m., Thursday, July 9 in Bldg. 4200, room G-13. Discussions will be held on efficient and profitable methods to motivate employees and ignite their entrepreneurial spirit. Participants may register via AdminSTAR. For more information, call Kimberly Davis at 544-3343.

Physics Seminars on TV Continue Through June 30

Physics for the Third Millennium seminar series is airing through June 30 on the Marshall Continual Learning Channel 14. The seminars cover a wide range of subjects including worm holes and warp drives, physics of antimatter and breakthrough propulsion physics. Programs air at 9 a.m., 11 a.m., 1 p.m. and 3 p.m. Monday through Friday. A complete schedule is available on the Web at: <http://inside/EODO/training/tvschedule.html>

Business Grant

Continued from page 1

open Friday — will eventually occupy 41,000 square feet of donated space within the Calhoun Community College's Huntsville campus. With that facility, BizTech will be able to incubate, or house, between 20-30 small businesses and expects to incubate a similar number of non-resident companies in North Alabama.

Tenants of the new facility will pay a service fee, which includes training, business counseling and a number of other benefits and services in addition to workspace. Utilities, janitorial, telephone service and maintenance are

included in the fee, as well as access to conference rooms, fax machines, copiers, computer peripherals and the Internet. "Perhaps most important in the list of benefits for BizTech tenants is access to mentors who will provide advice and opinions for fledgling entrepreneurs," said Randolph.

Marshall's Technology Transfer Office has helped fund BizTech since its inception in 1997, with past contributions of \$300,000. BizTech's other financial partners include the City of Huntsville, the Alabama Department of Economic and Community Affairs and the Tennessee Valley Authority.

Information Technology Services

Continued from page 2

communications capabilities for each job within the Agency and purchase a particular bundle of hardware, software and communications equipment for each "seat." The price for each type of "seat" will be fixed.

"ODIN has several goals," said Holcomb. "Most importantly, it will deliver cost-effective services to meet NASA's mission and program needs using commercial practices. It will allow NASA civil servants to focus on the Agency's core mission, make it easier for our systems to operate together and allow the Agency to share risks and rewards with the private sector."

ODIN also will allow NASA to better account for the funds it spends on local computing products and services, said Holcomb. With one set of contracts providing these services across the Agency, it will be clearer how much they are costing NASA. Long-term savings over the life of the contracts could approach 25 percent compared to existing procurement procedures, said Holcomb, and that has allowed the Agency to reduce its future Information Technology budgets.

The successful offerors are: Boeing Information Services Inc., Vienna, Va.; Computer Sciences Corporation, Laurel, Md.; Dyncorp TECHSERV, LLC, Reston, Va.; FDC Technologies, Bethesda, Md.;

OA Corporation, Greenbelt, Md.; RMS Information Systems Inc., Lanham, Md.; and Wang Government Systems Inc., McLean, Va..

The minimum dollar value of each contract is \$1,000. The maximum ranges from \$4.35 billion to \$13.12 billion, including orders placed by other agencies through GSA. The actual value of NASA's ODIN contracts will not be known until NASA Centers place orders with the vendors. The first order is expected to be placed by Oct. 1, 1998.

Under the ODIN delivery-order process, each NASA center will place orders exclusively with one vendor. Each delivery order can cover a period of up to three years. The period of performance for each fixed-price, Indefinite Delivery, Indefinite Quantity contract with each ODIN vendor is nine years.

As announced last November, GSA and NASA formed a partnership to provide a richer set of options to federal agencies for their computing and networking services. This agreement gives other agencies a choice between GSA's Seat Management contracts and ODIN. GSA will act as the focal point for other government agencies desiring to use ODIN. More information on the ODIN initiative can be found at the following Web site:

<http://outsource.gsfc.nasa.gov>

Employee Ads

Miscellaneous

- ★ Three Dynasty classic wool rugs and two runners, red background, \$1,200. 350-3784
- ★ Brass/pewter queen bed, \$225; Singer sewing machine in cabinet, \$35; old school-style desk, \$100; coffee table, \$25. 534-7880
- ★ Beanie Babies: Erin, Princess, Peace, some retired, sets of McDonalds' Teeny Beanie's, \$20 and up. 539-7834
- ★ Sears Lifestyle 3500 exercise bike, \$50; GE Electric cooktop, \$75. 882-0546
- ★ Goldwin AVDP XL 260cc driver, regular shaft, 10 degree loft, \$190. 971-9710
- ★ Golden retriever, 20-month-old female, to home w/fenced backyard, AKC registered, \$50. 230-6846
- ★ Washer, \$250; dryer, \$250; refrigerator, \$480; German schrank, \$580; trampoline, \$100. 830-8339
- ★ Driver Ti Bubble 2, 9.5 degree S-90, \$240; 7W Bubble 2, \$130. 350-6477
- ★ Exercise bicycle, \$50; Goldstar microwave, 0.5 cubic feet, \$40; Voit Gravity Rider exerciser, \$50. 837-2122
- ★ AKC Labrador retriever puppies, champion bloodline, black or yellow, \$200. 776-2152
- ★ Bench press w/leg extension and one dumbbell, various weights totaling 127.2 pounds, \$50. 464-9510
- ★ IBM Selectric II typewriter w/extra balls and ribbons, \$75. 882-1780
- ★ Office chair w/arms, adjustable height, \$75; Homelite gas-powered blower, \$25. 837-0085

Vehicles

- ★ Tractor, International Harvester 574, 52hp, gas engine, power steering, independent PTO, 8 speeds forward, 4 speeds reverse, roll cage, \$4,750. 778-9149
- ★ Tractor, 25hp Kubota w/40" finish mower and 60" landscape box, \$3,000. 656-4509
- ★ 1988 Honda Accord LX, 4-dr., 5-spd., AC, 135K miles. \$3,100. 837-0085
- ★ 1990 Volkswagen Corrado, 5-spd., black, sun roof, ABS brakes, 93K miles, \$5,000. 881-7096
- ★ 1993 Mazda 626 LX, white, 4-dr., 2.0L, 5-spd., all power, 52K miles, \$8,200. 461-8359
- ★ 1994 Chevrolet Caprice, leather interior, 71K miles, \$12,500. 837-6838
- ★ 1994 Cutlass Supreme Special Edition, 47K miles, CD/AC, alum. wheels, cruise, \$8,900. 880-1862
- ★ 1994 Buick Regal Custom, one owner, 54.5K miles, teal green, \$9,750. 828-4564
- ★ 1996 Pontiac Trans Sport van, \$12,500, o.b.o. 830-8339

- ★ 1994 Mustang Cobra, blk/blk, leather, new tires, 22K miles, 5-spd., all options, \$13,500 o.b.o. 726-2529
- ★ 1993 Ford conversion van, 5L, V8, AT/TV/VCP, cabinets, sofa, 79K miles. 882-1166
- ★ 1996 Camry LE, factory warranty, 29K miles, power, \$14,800. 837-3746
- ★ 1987 Isuzu Pup Sport pickup, 81K miles, garaged, maintenance records, burgundy, \$2,900 o.b.o. 883-1874
- ★ 1995 Mercury Cougar, V8, pearl white, all power, keyless/remote entry, 39K miles, \$9,950. 721-3945

Boats

- ★ Procraft 16' bass boat, 75hp Mariner motor, drive on trailer, two batteries, life jackets, trolling motor, depth finder, garage kept, \$5,000. 859-2599
- ★ Sailboat, Sunfish, two sails, fiberglass centerboard, sausage sail-bag, hiking strap, \$1,100. 880-3765
- ★ 1997 Yamaha 760 Waverunner, \$6,250. 259-5140

Wanted

- ★ Car trailer, approx. 5'x8'. 881-6390

Center Announcements

- ☛ **NARFE** — The National Association of Retired Federal Employees (NARFE), Chapter 736 will meet at 11 a.m. today, at Morrison's Cafeteria in Decatur. Susie Brown, volunteer co-coordinator for Parkway Medical Center Hospital, will speak. All retired federal employees are encouraged to attend. **Contact:** 355-2874 or 773-4826
- ☛ **Surplus Auction** — A local Defense Reutilization & Marketing Office sealed bid sale of property will be held June 29 at Bldg. 7405, Warehouse Road, Redstone Arsenal. Property may be inspected and bids submitted 8 a.m.-3 p.m. June 24, 25 and 26. To view material for auction and to submit bids, stop by Bldg. 7414, Red Oak Road. A catalog is available at the following website: www.drms.dla.mil
Contact: Donna Davis, 842-2570 or Elizabeth Couch, 842-9474
- ☛ **Pepsi Product Sale** — The NASA Exchange will be selling Pepsi products left over from Marshall's Open House 1-3 p.m. June 25 in Bldg. 4471. Cases of 20-ounce Pepsi, Diet Pepsi and Mountain Dew will be available at \$11/case.
- ☛ **Ski Week 1999** — The 8th annual NASA Ski Week will be hosted at Jackson Hole, Wyo., Jan. 30 - Feb 6, 1999. Over 250 skiers from seven NASA centers are expected at this 3,000-acre

resort in western Wyoming. All Marshall employees, on-site contractors, retirees and family members are eligible to participate.

Contact: 544-6568 or e-mail:

Thomas.S.Dollman@msfc.nasa.gov

- ☛ **MARS Fishing Club** — Results of the Goosepond tournament on June 13 are: first place — Robby Butler and Robby Hilley with fish weighing 5.17 pounds; second place — Charles Cothran and Ross Evans with fish weighing 4.71 pounds; and third place — Charles Kilgore and Don McQueen with fish weighing 2.99 pounds. Big fish honors went to Charles Kilgore with a 2.99 pound bass. The next tournament is scheduled for the evening of July 17 at Safety Harbor, Wilson Lake. The club encourages participation by NASA employees, family members and on-site contractors. A boat and experience are not required. **Contact:** John Pea, 544-8437; Don McQueen, 544-9073 or Charlie Nola 544-6367
- ☛ **Toastmasters** — The NASA Lunar Nooners Toastmasters Club will meet at 11:30 a.m. Tuesday, June 30, in Bldg. 4610's cafeteria conference room. All Marshall employees, contractors and friends are invited. **Contact:** Lee Johns, 544-5142

Job Opportunities

- CPP 98-81-CV, AST, Mission Operations Integration, GS-801-14**, Flight Projects Office, Space Station Development Office. Closes June 24.
- CPP 98-63-CP, Management Support Assistant (OA), GS-303-7**, Office of the Chief/Financial Officer, Systems Processes Office. Closes June 26.
- CPP 98-80-DC, AST, Aerospace Flight Systems, GS-861-14**, Microgravity Research Program Office, MSFC, Science & Applications Project Office. Closes June 26.
- CPP 98-55-CV, AST, Structural Dynamics, GS-861-14**, S&E, Structures & Dynamics Lab., Structural Test Division, Dynamics Test Branch. Closes June 25.
- CPP 98-57-RE, Supv. AST, Flight Systems Design, GS-861-15**, S&E, Propulsion Laboratory, Mechanical Design Division. Closes June 25.
- CPP 98-68-PL, Supv. AST, Mission Operations Integration, GS-801-15**, S&E, Mission Operations Lab., Operations Integration Office. Closes July 10.
- CPP 98-70-CP, Financial Manager, GS-505-14/15**, Office of Chief Financial Officer, Accounting Operations Office. Closes June 25.
- CPP 98-84-DC, AST, Technical Management, GS-801-15**, Microgravity Research Program Office, MSFC, Microgravity Science & Applications Projects Office. Closes July 1.
- CPP 98-83-CV, AST, Flight Structures, GS-861-14**, S&E, Structures & Dynamics Lab., Structural Design Division, Structures Design Branch. Closes June 30.
- CPP 98-69-CV, AST, Navigation, Guidance, & Control Systems, GS-861-14**, S&E, Structures & Dynamics Lab., Guidance & Control Systems Division, Flight, Dynamics, Precision & Mechanical Systems Control Branch. Closes June 30.

MARSHALL STAR

Marshall Space Flight Center, Alabama 35812

The Marshall Star is published every Wednesday by the Internal Relations and Communications Office at the George C. Marshall Space Flight Center, National Aeronautics and Space Administration. Contributions should be submitted no later than Friday noon to the Marshall Internal Relations and Communications Office (CO40), Building 4200. Submissions should be written legibly and include the originator's name. The Marshall Star does not publish commercial advertising of any kind.

Director of Internal Relations
and Communications — Norman Brown
Managing Editor — Angela D. Storey
Writer-Editor — Ann Marie Bryk

U.S. Government Printing Office 1998-633-111-80015

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NASA
Permit No. G-27